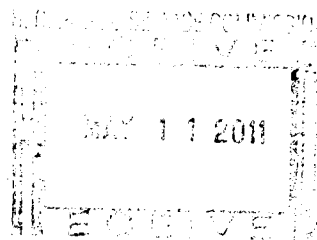


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May 9, 2011

Ms. Jocelyn D. Boyd  
Chief Clerk  
Public Service Commission of South Carolina  
Post Office Drawer 11649  
Columbia, SC 29211

Re: Amended Project Development Application of Duke Energy Carolinas, LLC for  
Approval of Decision to Incur Nuclear Generation Pre-Construction Costs  
Docket No. 2011-20-E

Dear Ms. Boyd:

Enclosed please find for filing and consideration the Surrebuttal Testimony of  
Nancy Brockway on behalf of the South Carolina Coastal Conservation League,  
together with Certificate of Service reflecting service upon the parties of record.

With kind regards I am

Sincerely,

Robert Guild

Encl.  
CC: Parties of Record

RETURN DATE: OK 5-9-11  
SERVICE: OK postmarked  
OK PD



BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 2011-20-E

In the Matter of )

)  
Amended Project Development Application of )  
Duke Energy Carolinas, LLC for Approval of )  
Decision to Incur Nuclear Generation Pre- )  
Construction Costs )

**Certificate of Service**

I hereby certify that on this date I served the above Surrebuttal Testimony of Nancy Brockway by placing copies of same in the United States Mail, first-class postage prepaid, addressed to:


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\_\_\_\_\_  
Robert Guild

May 9, 2011

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF  
SOUTH CAROLINA  
DOCKET NO. 2011-20-E**

In the Matter of	)	
Amended Project Development Application	)	SURREBUTTAL TESTIMONY
of Duke Energy Carolinas, LLC for Approval	)	OF
of Decision to Incur Nuclear Generation Pre-	)	NANCY BROCKWAY
Construction Costs	)	

*on behalf of the  
South Carolina Coastal Conservation League*

**MAY 9, 2011**

**x Q. Are you the same Nancy Brockway who filed direct testimony in this docket on April 6, 2011?**

1 A. Yes.

**Q. What is the subject of your surrebuttal?**

2 A.. In this testimony, I respond to the rebuttal testimony of Duke witnesses Janice  
3 Hager and James Rogers regarding system planning, the choice of resources,  
4 and the need for the two Lee power plants. I also respond to the testimony of  
5 Mr. Jones and Mr. Rogers on the impact of the ongoing Fukushima crisis on  
6 regulations, standards, schedules and costs of the Lee project. I also respond  
7 to the testimony of Mr. Rogers concerning the role of the Lee plants in the  
8 pursuit of a regional approach to nuclear development.

**Q. Please summarize the points you make in your surrebuttal.**

9 A. My testimony makes the following key points:

10 (a) none of the integrated resource planning material presented to the  
11 Commission reflects the unusual risks posed by the nuclear option, and thus  
12 cannot be relied on with confidence to support the Company's portfolio choices;

13 (b) Duke has recently observed diminished residential and general  
14 service load in the Carolinas that may reflect structural changes in energy use  
15 rather than just the results of the current economics of the region and thus  
16 reduce future load requirements, and should update its IRP to reflect this reality;

17 (c) the choice before the Company and the Commission is not "coal vs.  
18 nuclear" but whether proceeding with the two plants at Lee at this time is

1 prudent, in light of the reduced need for the plants' output and the availability of  
2 sufficient and environmentally sound alternatives;

3 (d) the ongoing disaster at Fukushima will cause significant delays in the  
4 process for obtaining a Combined Construction and Operating License (COL)  
5 for Lee, likely will result in significant changes to plant design and engineering,  
6 and will change the economics of the project and its output, all creating the  
7 imperative to reassess the best resource plan going forward;

8 (e) the amount of ratepayer money for which approval is sought by the  
9 Company is excessive, especially in light of the likely delay or suspension of  
10 AP1000 design approval and COLA proceedings while the Nuclear Regulatory  
11 Commission obtains and analyzes data on what is happening at Fukushima and  
12 considers and adopts strengthened regulations to avert such events in the  
13 United States;

14 (f) there is no basis for approving the proposal as filed, given the  
15 changes in circumstances since the filing was made, including the failure to  
16 obtain "super-CWIP" in North Carolina, the Fukushima disaster and related  
17 regulatory developments, and the Company's own announced decision to cut  
18 its requested approval in North Carolina in half;

19 (g) a directive for Duke, a regulated utility, to pursue a share of the  
20 Summer plant from its current owners (utilities providing electricity on a cost of  
21 service basis, one of which is regulated by this Commission) need not create  
22 the adverse bargaining position described by Duke; and

1 (h) Duke should not be allowed to hijack the Baseload Review Act  
2 provisions to provide unfettered access to ratepayer dollars to pursue or not  
3 pursue the Lee Station plants in whatever way it chooses, but rather should be  
4 required to justify its proposed budget, timeline and associated request for  
5 regulatory approval in light of changed circumstances.

**Q. Please begin with the integrated resource plans of the Company. What is the main point of Ms. Hager's rebuttal to you?**

6 A. Ms. Hager argues on p. 4, lines 3 through 8, that the Duke resource analyses,  
7 as reflected in her direct testimony in this docket and the 2007 and 2010 IRP,  
8 demonstrate that "a portfolio that includes the Project and a mix of new  
9 renewable resources, energy efficiency programs, and new natural-gas fired  
10 resources provides the best portfolio for meeting customers' energy needs in  
11 the future in a reliable and economical manner."

**Q. Do the Duke analyses demonstrate that a portfolio that includes the Lee project provides the best portfolio for meeting customers' energy needs in a reliable and economical manner?**

12 A. No. The Duke cost/benefit analyses reflect a set of input choices that ignores  
13 important realities. As noted in my Direct Testimony, even before the  
14 Fukushima events Duke's forecast of schedules and costs for the Lee project  
15 were unduly optimistic. Also, the resource plan analyses on the record in this  
16 docket do not reflect Duke's recent determination that small customer load is  
17 lower than expected recently, and may continue to be lower as a result of  
18 structural changes in usage. Most importantly, the Duke resource analyses fail  
19 to account for the risk of catastrophic loss inherent in nuclear generation, as

1 well as the financing, operating, regulatory, environmental and capacity risks  
2 attendant to nuclear development. Duke acknowledges that its analyses do not  
3 "capture the benefits of joint risk sharing." Hager Rebuttal at 9.

**Q. What are some of the nuclear-specific risks that joint risk-sharing would mitigate?**

4 A. There is a benefit in joint risk sharing, because the risks associated with nuclear  
5 development and operation are unique and daunting. For example, in pursuing  
6 pre-approval of its Lee investments, Duke shows that it understands that  
7 financing a nuclear plant with investors' dollars is not feasible. Yet Duke does  
8 not discount the value of nuclear development in its portfolio to reflect this  
9 reality. The Fukushima disaster confirms the ongoing reality that nuclear plants  
10 are subject to changes in the regulatory standards that in turn can drive up  
11 costs and precipitate financing difficulties. For example, it will be necessary for  
12 the NRC to review its standards for identifying and withstanding seismic activity  
13 in light of Fukushima. The onslaught of tornadoes that ravaged the middle  
14 South this spring, and extended east as far as Columbia, S.C., suggests the  
15 need to analyze the potential risks (e.g. to containment integrity) from tornado-  
16 caused damage. Other fuels may pose risks to the local environment in the  
17 event of a catastrophe, but there are fewer events that would precipitate a  
18 catastrophe, and the scale of the catastrophe will be smaller, than in the case of  
19 a nuclear power plant. This is a common-sense extrapolation from the need to  
20 use and store extraordinarily powerful uranium energy at the site. It is why the

1 design, construction and operation of nuclear power plants is so heavily  
2 regulated, and will continue to be so.

**Q. Aren't you being inconsistent when you challenge the sale of a share of Lee to JEA while calling on Duke to engage in, and reflect in its portfolio, greater risk-sharing?**

3  
4 A. No. There are different concerns at work in these two issues. The JEA  
5 problems have to do with (a) a transaction that appears to give JEA the ability to  
6 walk away from responsibility for Lee with little incentive to weigh such a  
7 decision against the loss of a serious investment in that plant, and (b) the  
8 prospective transfer to JEA, an out-of-state and unregulated entity, of the  
9 potential benefits of nuclear development in South Carolina, while retaining in-  
10 state the major costs and risks of development. These potential benefits  
11 include the value of low-carbon electric production capacity in the state, which  
12 may be mandated under future federal energy legislation. My point is that there  
13 needs to be a balancing of risk and reward, and the JEA option does not appear  
14 to strike a fair balance for the citizens of South Carolina. A purchase by Duke of  
15 a share of Summer, on the contrary, would be directly subject to the authority of  
16 the Commission to ensure that the transaction is fair to all ratepayers, and  
17 would keep any clean-energy benefits in the state as an offset to the risks of  
18 nuclear development.

**Q. Please describe the Company's recent determinations as to the load of residential and other small usage consumers.**

19 A. On May 3, 2011, Duke's Chief Financial Officer Lynn Good told the Charlotte  
20 (NC) Business Journal that residential electricity use was down for Duke Energy



1 in the first quarter, even when milder winter weather was taken into  
2 consideration. Ms. Good was quoted as saying that Duke "went into 2011  
3 projecting 1% year-over-year growth in demand from 2010. We will be short of  
4 that in the first quarter." She explained that Duke is "seeing some weakness in  
5 residential and commercial. We don't know if it's a trend — it's too early to  
6 make a judgment — but it's something we will be watching for the balance of  
7 the year." CEO James E. Rogers was quoted in the same article as saying that,  
8 while he thinks the suppressed residential load is related to recent high oil  
9 prices, there has also been a marked increase in the use of energy-saving CFLs  
10 and home energy management systems, with the result that increasing  
11 awareness may have changed use patterns. This would indicate a structural  
12 change in usage that should be reflected in planning forecasts.

**Q. Are there other indications that future load growth may be lower than predicted in 2007 and 2010 integrated resource plans?**

13 A. Yes. Bill Johnson, CEO of Progress Energy, told the Charlotte Business  
14 Journal on April 28, 2011 that

15 "for the first time since World War II, in 2009, there was a  
16 reduction in customer demand across the country. And it didn't  
17 come back in 2010. In 2010 there was great weather for the  
18 utilities, it was cold and it was hot. So there was demand, but  
19 when you took the weather piece out of it, demand was down  
20 nationwide 4 percent. What we don't know is if people have  
21 changed their usage. Is there more conservation? Is that having  
22 an impact? Or, is it consumer confidence? *You'd expect to see*  
23 *lower demand on the industrial and commercial side, as part of the*  
24 *normal cycle. But this is really the first time you've seen it in the*  
25 *residential sector on a sustained basis.*" (Emphasis supplied)  
26

27 Note that Mr. Johnson is slated to become CEO of Duke if the merger with

1 Progress Energy is approved. (He also opined in this interview that one  
2 potential benefit of the merger would be the ability to build only three nuclear  
3 plants in South Carolina, instead of the four now proposed. This suggests that  
4 at least in his view, whatever benefits there are of meeting future need with four  
5 nuclear plants is outweighed by the additional risks such development entails.  
6 This view would support a conclusion that greater risk and benefit sharing  
7 among South Carolina utilities in such nuclear generation as is built would be a  
8 positive step).

**Q. Does the Company's Rebuttal, filed on April 27, 2011, reflect the understanding that future load growth may be suppressed as a result of possible structural changes in customer usage?**

9 A. No. By April 28, 2011, the Company was aware that load had reduced among  
10 smaller customers, and that future load growth might be suppressed. However,  
11 the Company did not include this information in its Rebuttal in this docket, nor  
12 did it present a revised load forecast and associated resource plan analysis.

**Q. Duke officials are quoted as saying they do not yet know if this lower usage among residential and small commercial customers is a trend that will continue. In light of that uncertainty, why should the Company update its IRP to reflect a lowered load forecast?**

13 A. Persistently lower load growth could push out the need for new resources by  
14 several years, and significantly affect the benefits of proceeding with the  
15 construction of two new 1100 mW power plants by 2021. It would be imprudent  
16 not to perform at least a sensitivity analysis of the potential changes in the  
17 resource plan in light of the possible reduction in load from forecasts used in the  
18 IRP.

**Q. Has the Company adequately considered the impact on its risk if it shares in the costs and benefits of nuclear plants other than Lee?**

1 A. No. As Ms. Hager testifies, Duke's "models do not capture the benefits of joint  
2 risk sharing." Rebuttal at 9. In other words, the Company does not  
3 systematically reflect the impacts on the riskiness of the proposed portfolio of  
4 purchasing equity in or output rights to other nuclear plants being developed in  
5 the region. For this reason alone, the model outputs cannot be relied on as the  
6 determinative factor in choosing a resource portfolio.

**Q. Does Ms. Hager discuss the impact of the Fukushima crisis on the future cost, schedule or risk of nuclear power?**

7 A. No. Ms. Hager does not mention Fukushima at all. The 2007 and 2010 IRPs of  
8 course do not reflect Fukushima as the disaster began only in March of 2011.  
9 Neither do they reflect the exposure of nuclear power to risks of catastrophic  
10 events, however. The need to strengthen nuclear plant design was argued by  
11 some before Fukushima, and particularly in relation to the AP1000 design  
12 (which had still not received the go-ahead from the NRC despite several years  
13 of review and revision). Fukushima has resolved any question of the need to  
14 revisit these design and standards issues. I will discuss the implications of  
15 these events for Duke's resource planning further below, in considering Mr.  
16 Jones' testimony regarding the Fukushima catastrophe.

**Q. Ms. Hager suggests that the Coastal Conservation League supports older coal plants over the new nuclear plant, and that this is "interesting," presumably contradicting the League's dedication to the environment. Rebuttal at 6. Is this a sound criticism?**

1 A. No. My testimony did not mean to suggest that the alternatives before Duke  
2 (and South Carolina) are limited to the choice of coal versus nuclear. I agree  
3 with Ms. Hager that the selection of a resource plan is "a 'both/and' scenario,  
4 not 'either/or.'" Hager Rebuttal, p. 4, at lines 22-23. Duke itself repeatedly  
5 asserts that there is a wide range of alternatives to meet forecast needs,  
6 including greater levels of renewable generation and energy efficiency. See  
7 Hager Rebuttal at 3-4, 9, and Hager Rebuttal Testimony Exhibit A, DUKE  
8 ENERGY CAROLINAS INTEGRATED RESOURCE PLAN, SEPTEMBER 1,  
9 2010 – PUBLIC VERSION, Section IV, *Resource Alternatives to Meet Future*  
10 *Energy Needs*, pp. 66 following. What is important is to develop a portfolio that  
11 optimizes the mix of resources, given the entire scope of factors, including  
12 economic, operating, financing and environmental risks among others.

**Q. What does Mr. Jones say on rebuttal concerning the impact of the Fukushima disaster on the Company's plans?**

13 A. Mr. Jones admits that the Company "needs to understand in detail what  
14 occurred at Fukushima-Daiichi nuclear plant, and this will require several  
15 steps." Jones Rebuttal at p. 6, lines 3-4.

**Q. According to Mr. Jones, what will be the process for the NRC and the industry to understand what has happened and is happening at Fukushima, and their implications for needed strengthening of nuclear plant design, construction and operation in the United States?**

16 A. Mr. Jones describes a multi-step process by which the implications of the  
17 Fukushima disaster on proposed nuclear plants such as Lee will be assessed,  
18 and efforts made to develop satisfactory protections. As Mr. Jones states, the  
19 NRC will conduct the initial phase of the assessment, gathering data and

1 beginning analyses. "Once the full and complete facts around the events in  
2 Japan are known and understood, those events should be compared to the  
3 proposed plants in the U.S. and the expectations of the range of possible  
4 occurrences at the site of the Project. This analytical step will likely be  
5 performed jointly by Duke Energy Carolinas and the NRC with input from  
6 interested intervening groups." Jones Rebuttal at 6. Only at that point,  
7 according to Mr. Jones, would the Company be in a position to define any  
8 necessary modifications to the Project.

**Q. Does Duke provide an estimate of the amount of time that it will take for the industry, the NRC and the Company to complete this assessment of the need for changes to proposed nuclear projects, including Lee?**

9 A. No. In fact, Mr. Jones makes the point that this assessment process will leave  
10 "ample time to incorporate the necessary modifications into the Project...." This  
11 testimony suggests that the Company does not anticipate an assessment and  
12 response schedule quick enough to maintain the Project on its current schedule  
13 for obtaining a license. Rogers Rebuttal at 9.

**Q. Mr. Jones and Mr. Rogers say there will be "little disruption" from the incorporation of the necessary modifications to the Project after the Fukushima assessment process. Do you agree?**

14 A. No. First it is not clear what type of "little disruption" Duke has in mind in this  
15 testimony. Perhaps the Company means that buildings on the site would not  
16 have to be torn down to make way for buildings incorporating the post-  
17 Fukushima safety conditions; that is to say, perhaps they do not expect a  
18 physical disruption of existing activities. But that is not by any means the

1 primary "disruption" that the Project is likely to face as the Fukushima impacts  
2 are incorporated into nuclear plant development in the United States.

**Q. What are the primary sources of disruption to the Project that are likely to occur as a result of the Fukushima catastrophe?**

3 A. Whether by order or in practice, the Nuclear Regulatory Commission will need  
4 to put further progress on design review and license application review to the  
5 side, as it first responds to the immediate and ongoing crisis at Fukushima,  
6 assesses and responds to safety concerns at operating plants in the United  
7 States, and ultimately undertakes a thorough analysis of the Fukushima events,  
8 including likely revisions to design and license requirements to prevent disasters  
9 at United States plants similar in any way to the disaster at Fukushima.

**Q. Has the NRC suspended licensing activities in the past to undertake such analyses, reviews and rulemaking?**

10 A. Yes. After the accident at Three Mile Island in 1979, the NRC put licensure  
11 procedures on hold, until it had conducted a thorough review of the accident,  
12 assessed risks associated with the accident, and developed and implemented  
13 new design and operating rules to reduce those newly-understood risks. This  
14 process took several years.

**Q. Can the NRC continue business as usual during its response to the Fukushima catastrophe?**

15 A. No. While the Commission is trying to maintain its day-to-day functions, since  
16 March 11, 2011 its staff have worked nights and weekends on the immediate  
17 response to Fukushima-related safety questions at the country's 104 operating  
18 reactors. They cannot maintain this pace indefinitely, and still conduct their

1 usual activities. Further, the Commission has initiated a 90-day review of the  
2 events at Fukushima, and plans to open a more open-ended review after this  
3 preliminary analysis is complete. In addition, the paucity of information from the  
4 Fukushima plants (in part caused by the fact that monitors and gauges were  
5 rendered inoperable by the events) means that the Commission cannot yet form  
6 a reliable estimate of how long it will be before it knows what has been taking  
7 place at the site, and the causes of the various adverse events at Fukushima.  
8 Until it has this information, it cannot assess the extent to which and the ways in  
9 which design of new plants in the United States, such as the AP1000, will need  
10 to be changed to prevent similar disasters here. For a frank discussion of these  
11 realities, see the transcript of the April 28, 2011 briefing by NRC staff to the  
12 Commission, available at [http://www.nrc.gov/reading-rm/doc-](http://www.nrc.gov/reading-rm/doc-collections/commission/tr/2011/)  
13 [collections/commission/tr/2011/](http://www.nrc.gov/reading-rm/doc-collections/commission/tr/2011/). NRC Executive Director for Operations  
14 Borchardt makes a brave commitment to continue with non-Fukushima  
15 activities, but acknowledges that the response to Fukushima will consume NRC  
16 resources for an indefinite period.

**Q. Does Duke acknowledge that modifications to the Project will likely be necessary in light of lessons learned from the Fukushima catastrophe?**

17 A. Not explicitly. Neither Mr. Jones nor Mr. Rogers makes clear how the Company  
18 and the NRC could proceed towards a COL for the Project *as currently planned*,  
19 without having to redo at least some of the design work later, and with it at least  
20 some of the construction planning. The further along the Project progresses  
21 on its current path, the greater the likelihood that significant portions of the

1 "evaluation, design, engineering, environmental and geotechnical analysis and  
2 permitting, contracting, other required permitting including combined operating  
3 license permitting, and initial site preparation" will need to be scrapped and  
4 done over.

**Q. Is it reasonable to assume that the Lee project can maintain the same schedule and budget as reflected in the filing, in light of the Fukushima disaster?**

5 A. No. In reality, the review of the events at Fukushima will take years, not  
6 months, during which time it will not be sensible to proceed with AP1000 design  
7 review and COLA proceedings based on the old design. This reality means that  
8 Duke will not be able to receive its COL as scheduled in 2013, even if such a  
9 schedule had been reasonable before Fukushima. Consequently, it will not be  
10 sensible for Duke to engage in negotiations regarding a construction contract  
11 until it is clear exactly what is to be constructed.

**Q. What are some of the COLA activities that will need to be suspended pending the assessment of Fukushima and any related design and licensing improvements?**

12 A. Most of the activities Duke planned to undertake, before the Fukushima  
13 catastrophe, will be subject to delay pending incorporation of the Fukushima  
14 consequences. These activities are listed in the Amended Project Development  
15 Application at pages 8-13. The Application recites that the following general  
16 categories of pre-construction work "have been performed and are anticipated  
17 to be performed to continue development of Lee Nuclear Station through the  
18 Company's anticipated receipt of the COL for the project in 2013"-- I have



1 italicized those activities that will likely have to be suspended or slowed pending  
2 incorporation of the Fukushima consequences:

3 ~ COLA Preparation —includes labor, expenses, and contract support for  
4 preparation of the COL Application tendered to the NRC on December 13,  
5 2007. ...

6 ~ *NRC Review and Hearing Fees* —includes costs associated with  
7 *activities required as a follow-up to submittal of the NRC COLA, and include:*  
8 *NRC review fees; costs associated with responding to NRC requests for*  
9 *additional information regarding the COLA, including revisions and periodic*  
10 *updates required to the COLA. Also included are costs associated with*  
11 *development and regulatory review of various required permits and labor and*  
12 *expenses required for periodic updates to Duke Energy Carolinas' application to*  
13 *the Department of Energy for a Loan Guarantee for Nuclear Power Facilities.*

14 ~ *Land and Right of Way Purchases* —includes cost of purchasing  
15 *approximately 4000 acres for construction of Lee Nuclear Station, the make-up*  
16 *ponds, and rights of way for railroads.* The original site purchase was completed  
17 in late 2005; however, additional property has been acquired for the land  
18 needed to construct a supplemental pond for makeup water for the plant in the  
19 event of an extended drought and for railroad rights of way. Additional land  
20 rights may be acquired to complete the desired buffer zone around Make-Up  
21 Pond C. Transmission right-of-way acquisition has not yet begun.

22 ~ *Pre-construction and Site Preparation* —includes costs associated with  
23 remediation and demolition of onsite legacy structures. *Other site preparation*

1        *activities include the engineering required for bringing water, sewer,*  
2        *transmission, and railroads to and from the site, as well as engineering for traffic*  
3        *improvements around the site. This category also includes ongoing industrial 24*  
4        *by 7 security and miscellaneous site maintenance, such as mowing, utilities,*  
5        *maintenance of excavation dewatering pumps, perimeter fence repairs, repairs*  
6        *to site drainage system and erosion repairs.*

7                *~ Supply Chain, Construction Planning and Detailed Engineering—*  
8        *includes costs associated with working with the supplier to define a complete*  
9        *project scope and estimate and subsequent costs for negotiating an*  
10       *engineering, procurement and construction agreement in 2008. This category*  
11       *also includes site specific engineering activities from 2011 to 2013 that, to date,*  
12       *have been limited to conceptual design necessary to support licensing and*  
13       *permitting activities. These conceptual designs have included: the raw water*  
14       *system, including river intake structures, pumps and designs; a conceptual site*  
15       *drainage plan; physical site security features; routing and material types for*  
16       *condenser circulating water systems, cooling tower basins; make-up pond(s) A,*  
17       *B, and C intake structures, and, waste water retention basins. In 2011, detailed*  
18       *design engineering of the site specific structures, systems, and components will*  
19       *begin. A key Duke Energy risk mitigation strategy is to complete engineering*  
20       *work prior to site deployment, which is currently scheduled for 2014. Completing*  
21       *site specific engineering is a three to four year activity and therefore, needs to*  
22       *begin in 2011 to support the current schedule. Site Specific systems, structures,*  
23       *and components include Storm Drainage System; Sanitary Drain System; Yard*

1 *Fire Protection System; Waste Water System; Potable Water System;*  
2 *Circulating Water System; Raw Water System; Liquid Radwaste Water System;*  
3 *Retail Onsite Power System; Chilled Water Plant System; Meteorological*  
4 *System; Utilities; Security; Commercial and Temporary Buildings; Site Specific*  
5 *Support Buildings.*

6 *~ Operational Planning —Continued operational planning activities*  
7 *include development of plant procedures and programs, as well as training*  
8 *material.*

**Q. In your answer to the previous question, your highlights have suggested that in fact most of the activities originally scheduled for continuing the Lee Project are subject to delay to incorporate needed revisions caused by the Fukushima disaster. What do you conclude about the proposed two-year budget and the amount needed to preserve the Lee project?**

9 A. Most of the budget items originally estimated by the Company to take place in  
10 the next two years relate to the activities at risk of being rendered obsolete by  
11 regulatory developments in response to Fukushima.

**Q. Please provide a breakout of the original budget planned for the next two years at Lee before the Fukushima disaster.**

12 A. The existing budget for activities on the Lee station in the next two years was  
13 provided in the confidential answer to the ORS First Continuing Audit  
14 Information Request, Data Request No. 1-6. This chart was attached as  
15 Confidential Exhibit 1 to Mr. Phillips' direct testimony in this docket. I will not  
16 cite any specific number on this chart, as it is confidential. I will observe,  
17 however, that the categories of costs all include activities that would not be  
18 needed or prudent (at least at the level earlier budgeted) if the AP1000 design

1 review and Lee COLA schedule were suspended and extended to incorporate  
2 the lessons of Fukushima. There would be some cost for site protection, and  
3 some fees to keep the COLA alive at the NRC, but it is realistic to forecast that  
4 Duke will not need to prepare for or participate in a review of and hearings on  
5 its COLA, will want to avoid costly site preparation that might need to be  
6 revisited, will want to hold back on firming up its supply chain, construction  
7 planning and detailed engineering planning, and will not want to undertake full  
8 operational planning until the design of the plant and its methods of operation  
9 are clear.

**Q. Please describe the recent events in North Carolina's review of Duke's Lee proposals, as they affect the situation in South Carolina.**

10 A. As I mentioned in my Direct Testimony, Duke announced some time ago that it  
11 would not proceed with Lee unless it received legislative approval for "Super-  
12 CWIP."<sup>1</sup> Robert Gruber, Executive Director of the Public Staff of the North  
13 Carolina Utilities Commission, said in mid-April that the only prudent course was  
14 to put off the proposed Super-CWIP legislation in that state until federal  
15 regulators establish new safety rules based on lessons learned at the four  
16 crippled Fukushima reactors in northern Japan, after which the impact on plant  
17 costs can be evaluated. The opportunity to file original bills in the present  
18 legislative session has passed with no Super-CWIP legislation filed. It has

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<sup>1</sup> As an aside, I should note that the fact that, contrary to Mr. Rogers' implication, Rogers Rebuttal at p. 3, line 19, South Carolina is now operating under a Super-CWIP regime does not make the introduction of such a CWIP approach in North Carolina any less "super."

1 also been reported that Mr. Gruber is proposing to the North Carolina  
2 Commission that it approve only a one-year period of further expenditures at  
3 one-half the original amount sought with a two-year schedule, as a resolution of  
4 the pending proceeding before the Commission in that state. Since then, the  
5 press reports that Duke has filed notice with North Carolina Commission that it  
6 is now prepared to accept the recommendation of the Public Staff of the  
7 Commission and ask only for \$120 million more at this time. This approval  
8 would be sought for expenditures through next summer, after which the  
9 Company would be free to come back to the North Carolina Commission for  
10 further approvals.

**Q. Was the Company's revised request in North Carolina affected by the Fukushima disaster?**

11 A. According to a published report, Duke spokesman Jason Walls stated that Duke  
12 has agreed now with the Public Staff in North Carolina that it makes sense to  
13 proceed more cautiously on authorizing additional spending. "Our decision to  
14 accept the Public Staff's position is certainly influenced by events in Japan,"  
15 Walls said to the Charlotte Business Journal on May 4, 2011. "We believe with  
16 where we are today, the Public Staff's proposal is reasonable and gives us  
17 some assurance that our decision to spend on planning for Lee is prudent."

**Q. Is the 1-year/1/2-budget proposal now under consideration in North Carolina a suitable alternative to consider in South Carolina, in light of the Fukushima catastrophe?**

18 A. The 1-year/1/2- budget proposal now under consideration in North Carolina  
19 continues to leave too much discretion in the hands of the Company, and would

1 authorize too high an amount for work that is realistic in the coming year. I  
2 agree with Mr. Phillips' statement on p. 19 of his Direct Testimony that "Duke  
3 should have the burden of showing that [its proposed expenditures are in fact  
4 the minimal amount necessary to maintain its filing with the NRC." Given the  
5 difference between full hearings on an active COL application and continued  
6 design work and planning, on the one hand, and maintaining the security of the  
7 site and the COL application on file pending resolution of Fukushima issues, it is  
8 not plausible that exactly one-half the identical budget originally proposed for  
9 the coming two years will represent the likely expenditures of Duke in  
10 maintaining the Lee option.

**Q. What if the NRC assessment of Fukushima is rapid, and all safety and environmental issues for design and licensing of an AP1000 are resolved in the next year?**

11 A. In such an unlikely event, Duke could return to this Commission with the  
12 updated information, and a new budget and timetable for the work ahead at that  
13 point.

**Q. Mr. Jones says in effect that the full two-year, \$230 million proposal should be approved by this Commission now, because the Company has so far done "exactly what is recommended" as prudent management. Do you agree with his reasoning?**

14 A. No. Again, without looking at what Duke has done to date since it was first  
15 authorized by this Commission to expend funds on Lee, circumstances have  
16 changed since the original filing. But Duke resists amending its filing to take  
17 these changes into account. In effect, Mr. Jones is asking South Carolina

1 ratepayers to give the Company a blank check good for two years in an amount  
2 up to the South Carolina share of \$230 million.

**Q, Mr. Jones says that Mr. Phillips may be challenging the statutory scheme by his recommendation that Duke be required to show that expenditures approved in this docket will be the minimum necessary to maintain the license application on file. Do you agree?**

3 A. No. It is clear from the desired effect of the statute that the key purpose of the  
4 extraordinary ratemaking allowed by the statute is to reassure utilities and their  
5 investors that expenditures in line with baseload review approval will be  
6 considered prudent when time comes for them to be put into rate base. I  
7 understand that even Duke believes it must demonstrate the prudence of its  
8 historic expenditures at that point. But if it receives this Commission's pre-  
9 approval, many of the questions that go into a prudence decision (including in  
10 particular the prudence of planning) will have been largely decided, in practice if  
11 not in law, and what will be left to the Commission will be mainly narrow issues  
12 of construction competence. Duke wants to have it both ways - the Company  
13 wants the certainty of Super-CWIP (in both South and North Carolina), but it  
14 wants to avoid being held to any standard of prudence in the baseload review  
15 process. This Commission will not be surprised if, when Duke presents Lee for  
16 rate base treatment, it will claim that it was presumptively prudent because it did  
17 what it said it would do in a baseload review case. From a regulatory  
18 perspective, this is untenable.

**Q. Mr. Rogers criticizes your suggestion that Duke be required to pursue a share of the Summer plants in lieu of proceeding further with Lee at this time. Is he correct in his concern?**

1 A. No. My testimony was not intended to force Duke into an unfair and adverse  
2 bargaining position. A directive for a regulated utility such as Duke to pursue a  
3 joint effort with another regulated utility such as SCANA (and by extension, its  
4 partners in the Summer project) should not be taken by SCANA as an invitation  
5 to bargain in bad faith, withhold key information, or otherwise seek to take  
6 advantage of Duke's South Carolina customers. Nor should SCANA feel free to  
7 allow its partner in the Summer project to behave in this way. Transactions  
8 between regulated utilities should be at cost. There is no basis for one South  
9 Carolina utility or one set of South Carolina utility customers to benefit at the  
10 expense of another, merely because of perceived superiority of bargaining  
11 position. The Commission retains supervisory tools over all parties to such  
12 negotiations, including SCANA -- and through it its Summer partners, who, as a  
13 practical matter, will need SCANA's agreement for any such transaction --- to  
14 prevent and correct any such gouging. Among other things, the fairness of the  
15 negotiations on the part of each regulated utility is an aspect of management  
16 performance that could be taken into account in setting a just and reasonable  
17 return on equity.

**Q. Does this complete your Surrebuttal Testimony?**

18 A. Yes.